

ABB BALDOR RELIANCE III

Customer information packet

EM3705T

3HP, 865RPM, 3PH, 60HZ, 215T, 3744M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	10.400 A @ 230.0 V 5.200 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.2 a
Insulation Class	F

Part Detail

Revision	H
Type	AC
Mech. spec.	37G813
Base	
Status	PRD/A
Elec. spec.	37WGT944
Layout	37LYG813
Eff. date	03-19-2026
CD Diagram	CD0005
Poles	08
Leads	9#14
Proprietary	False
Created date	04-07-2015

Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	19.01 IN
Power Factor	62
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	865 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2116L											
CAT.NO.	EM3705T										
SPEC.	37G813T944G1										
HP	3										
VOLTS	230/460										
AMP	10.4/5.2										
RPM	865										
FRAME	215T			HZ		60		PH		3	
SER.F.	1.15	CODE	H	DES	B	CL	F				
NEMA-NOM-EFF	86.5	PF	62								
RATING	40C AMB-CONT										
CC	010A										
DE	6307	ODE	6206								
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA296338	SA 37G813T944G1	1.000 ea
RA282380	RA 37G813T944G1	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3100A01	PUEP ASSEMBLY - ROUTING PUPROSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
37GS1008	37 GS FOR CB LID - LEXIDE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 ea
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 49977

Typical performance - not guaranteed values

Winding: 37WGT944-R007			Type: 3744M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		18.3 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		10.4/5.2	Breakdown Torque		49 LB-FT		
R.P.M.		865	Pull-up Torque		27.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		30.6 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		25.6 A
Service Factor (S.F.)		1.15	No-load Current		3.21 A		
NEMA Nom. Eff.		86.5	Power Factor	62	Line-line Res. @ 25°C		3.5 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		34°C
S.F. Amps					Temp. Rise @ S.F. Load		41°C
					Locked-rotor Power Factor		33.3
					Rotor inertia		1.09 LB-FT2

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	55	62	66	69	64
Efficiency	78.9	85.6	87	86.8	85.6	83	86.1
Speed	891	884	875	865	853	840	858
Line amperes	3.39	3.82	4.45	5.25	6.18	7.3	5.81

ABB Motors and Mechanical Inc.

WINDING # 37WGT944

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 865 RPM 460 V 3744M

TORQUES (LB-FT): PO=49 PU=27.6 LR=30.6 LRA=25.6





